**National Science Foundation**
4201 Wilson Boulevard
Arlington, Virginia 22230

Title: The Division of Electrical and Communication Systems, (ECS)
Molecular, Organic and Spin Electronics, Program Director Employment Opportunities
Dear Colleague Letter

Date: October 27, 2005

Dear Colleagues,

The Division of Electrical and Communication Systems (ECS) announce a nationwide search for a senior-level engineering researcher to serve as Program Director for the Molecular, Organic and Spin Electronics Program at the National Science Foundation (NSF). The desired starting date for the position is September 1, 2006.

The Division of Electrical and Communications Systems (ECS) addresses fundamental research issues underlying component and device technologies, computation, controls and networking principles at the nano, micro and macro scales, and supports the integration and networking of complex systems for a variety of application domains in sensing, imaging, telecommunications, information networks, disaster mitigation, homeland security, robotics, power systems, environment, transportation, aerospace, healthcare, manufacturing and other systems-related areas. ECS envisions a research community that will address major technological challenges in devices and systems due to the convergence of micro/nano/info/bio-electronics, controls, communications, networks and computation. ECS has a continuing goal to integrate education into its research programs to ensure a diverse workforce in the 21st Century that will continue innovative advances for the rapid development of emerging technologies as drivers of the global economy.

The ECS Division is organized around three programs:

- Electronics, Photonics and Device Technologies (EPDT)
- Control, Networks and Computational Intelligence (CNCI)
- Integrative, Hybrid and Complex Systems (IHCS)

The management of these programs involves a team approach by Program Directors of the ECS Division, to reflect the increasing convergence of traditional disciplinary topics and the need for interdisciplinary approaches to new problem areas. In addition to these program areas, ECS sponsors workshops on areas of frontier and innovative technologies, which often lead to special program initiatives. Please visit our web site at http://www.nsf.gov/div/index.jsp?div=ECS

This job opening is in the area of Molecular, Organic and Spin Electronics in the EPDT program. The candidate for this position should have broad expertise and specific demonstrated experience in electronic, magnetic and organic thin films and devices to support next generation micro/nano electronics, and integrative and hybrid systems. Areas of interest include micro and nano electronic devices, spin electronics, micro/nanomagnetics, molecular and organic electronics,

power electronic devices, high temperature devices, high frequency devices, electromagnetic devices, metrology, packaging and interconnect technologies.

Program Director positions at the National Science Foundation provide a challenging experience and an excellent opportunity to encourage and support engineering research and education. The individuals will work with other Program Directors in formulating research strategies, developing cooperation among government, academia and industry, fostering outreach to underrepresented groups, and will provide leadership within NSF and the research community. The positions require a Ph.D. with a minimum of six years of academic, government or industrial experience.

The Program Director position recruited under this announcement may be filled under the following appointment options:

- **Intergovernmental Personnel Act (IPA) Assignmen**t. Individuals eligible for an IPA assignment with a Federal agency include employees of state and local government agencies or institutions of higher education, Indian tribal governments, and other eligible organizations in instances where such assignments would be of mutual benefit to the organizations involved. The individual remains an employee of the home institution and NSF provides funding toward the assignee's salary and benefits. Initial IPA assignments are made for a one-year period and may be extended by mutual agreement for up to two additional years.

- **Visiting Scientist Engineering Educator.** Appointment to this position will be made under the Excepted Authority of the NSF Act. A Visiting Scientist is on non-paid leave status from their home institution and appointed to NSF's payroll as a Federal employee. NSF withholds Social Security taxes and pays the home institution's contributions to maintain retirement and fringe benefits (i.e. health benefits and life insurance), either directly to the home institution or to the carrier. Appointments are usually made for up to one year and may be extended for an additional year by mutual agreement.

For additional information on NSF's rotational programs, please see "Programs for Scientists, Engineers, and Educators" on the NSF website at http://www.nsf.gov/about/career_opps

Should you or your colleagues be interested in this position, or wish to nominate suitable candidates, please contact the search committee coordinator, Dr. Rajinder P. Khosla (rkhosla@nsf.gov), and forward a curriculum vitae to him by March 31, 2006. Applications will be reviewed immediately after this date, though the position will remain open until filled.

For questions or further information, please feel free to contact:

Dr. Rajinder P. Khosla, Search Committee Coordinator
Division of Electrical and Communications Systems

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